

Title: Free moving metallic particle detection in GIS

Abstract

High reliability of gas insulated switchgear apparatus is diminished by the presence of defects inside the system. The most common defects are due to metallic particles. This defect can be detected by several techniques, one of which is that using acoustic sensors placed on the enclosure. This paper presents the technique to detect metallic particle from the parameters of acoustic signal such as maximum acoustic amplitude and number of pulses, which exceed the specified level of maximum acoustic amplitude at different supply voltage